

### **REMARKS**

Claims 1-38 are pending in the present application. Claim 30 has been amended, without acquiescence or prejudice to pursue the original claims in a related application. No new matter has been added.

#### **Claim Rejections Under 35 U.S.C. § 101**

Claims 28 and 30 stand rejected under 35 U.S.C. § 101 because the claimed invention is allegedly directed to non-statutory subject matter.

1. According to the Office Action, claims 28 and 30 allegedly recite functional descriptive material, and therefore, are directed toward non-statutory subject matter. Applicants note that “When functional descriptive material is recorded on some computer-readable medium, it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized” (MPEP 2106.1). Applicants respectfully submit that claims 28 and 30 both contain at least one element that is stored on some computer-readable medium. Thus, Applicants respectfully request that the rejections be withdrawn for independent claims 28 and 30.

#### **Claim Rejections Under 35 U.S.C. § 102**

##### **Claims 1-7, 12-13, 15-17, 27-28, and 31-34**

Claims 1-7, 12-13, 15-17, 27-28, and 31-34 stand rejected under 35 U.S.C. §102(b) as being unpatentable over U.S. Patent No. 6,182,258 issued to Hollander (“Hollander”).

1. Claim 1 recites the limitation “the **external debugger debugging** the general programming language portion...handling a simulator request with the external debugger for the simulator that is interrupted, the **external debugger calling a request processing function at the simulator.**” Claims 27 and 28 recite similar limitations. Applicants respectfully submit that Hollander does not disclose an external debugger debugging a general programming language and the external debugger calling a request processing function at the simulator.

First, Applicants note that in the cited sections Hollander discloses verification of a design of a device by driving or sampling a simulation or with the execution of a software program that is intended to be run on the device, and does not disclose the debug of a general

programming language (Column 9, lines 58-65 and Col. 10, lines 20-50). During execution of the software to be run on the device under test, the Hollander invention makes requests on behalf of the software program to a model of the device at points when the software requires interaction with the device (Column 10, lines 20-50). Nowhere in the cited sections is a debugger debugging a programming language and calling a request processing function at the simulator.

Debugging is described in a later section of the Hollander reference. In contrast to the presently claimed invention, Hollander discloses using a record/replay facility of a simulation in order to debug the software program by allowing for the recording of a simulation to use for later debugging (Column 11, lines 1-11). There is no need in Hollander for an external debugger to call a request processing function at the simulator because a recorded simulation is used for debugging purposes. Thus, Hollander does not disclose the **external debugger debugging the general programming language portion...handling a simulator request with the external debugger for the simulator that is interrupted, the external debugger calling a request processing function at the simulator**.

For at least these reasons, Applicants submit that Hollander fails to anticipate every limitation of claim 1. Because claims 27 and 28 share each of the limitations of claim 1 discussed above, they are not anticipated by Hollander. Furthermore, because claims 1-7, 12-17, and 31-34 depend from the independent claims, they also are not anticipated by Hollander.

### **Claim Rejections Under 35 U.S.C. § 103**

#### **Claims 8-11**

Claims 8-11 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Hollander in view of U.S. Patent No. 6,466,898 issued to Chan ("Chan").

Applicants respectfully submit, as discussed above, that Hollander in view of Chan fails to disclose, teach or suggest all the limitations of claim 1, from which claims 8-11 depend. Chan does not disclose the deficiencies present in Hollander. Chan is directed toward a multithreaded HDL logic simulator and Chan is silent with respect to a debugger. Thus, Chan does not disclose the **external debugger calling a request processing function at the simulator** and Applicants respectfully request that the rejection be withdrawn.

For at least these reasons, Applicants submit that Hollander in view of Chan fails to disclose, teach or suggest every limitation of claim 1. Because claims 8-11 depend from claim 1, they also are not disclosed, taught or suggested by Hollander in view of Chan.

Claim 14

Claims 8-11 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Hollander in view of Stallman et al. “Debugging with GDB: The GNU Source Level Debugger”, January 2002, book summary.

Applicants respectfully submit, as discussed above, that Hollander in view of Stallman fails to disclose, teach or suggest all the limitations of claim 1, from which claim 14 depends. Stallman is a book summary for “Debugging with GDB: The GNU Source Level Debugger” and is directed toward the contents of the book covering debugging with GDB, and does not disclose **the external debugger calling a request processing function at the simulator**. Applicants respectfully request that the rejection be withdrawn.

For at least these reasons, Applicants submit that Hollander in view of Stallman fails to disclose, teach or suggest every limitation of claim 1. Because claim 14 depends from claim 1, claim 14 is also not disclosed, taught or suggested by Hollander in view of Stallman.

Claims 18-23, 25-26, 29-30, 36, and 38

Claims 18-23, 25-26, 29-30, 36, and 38 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Hollander in view of Chan.

Claim 18 recites the limitation “handling the one or more waiting requests for processing of the first language portion by having processing of the second language portion call a request processing function at the first language portion that has been interrupted.” Claims 29 and 30 recite similar limitations. Applicants agree with the Examiner that Hollander does not teach determining whether there are one or more waiting requests for processing of the first language portion and indicating a need for processing of the second portion to call a request processing function at the first language portion. Applicants respectfully submit that Chan does not disclose the deficiencies present in Hollander.

According to the Office Action, column 7 lines 1-7, lines 32-39, Figure 3 element 14 and Figure 8 element 42 of Chan teaches determining whether there are one or more waiting requests for processing of the first language portion. Applicants respectfully submit that Chan does not teach determining whether there are one or more waiting requests for processing of the first language portion and indicating a need for processing of the second portion to call a request processing function at the first language portion.

Chan is directed toward a simulator checking if there are certain pending events and the simulator processing the events (Chan, Column 7, lines 1-5). Chan does not indicate to a need for processing of the second portion to call a request processing function because all simulator events are processed by the simulator after a determination is made at the simulator. Thus, Chan does not teach determining whether there are one or more waiting requests for processing of the first language portion and indicating a need for processing of the second portion to call a request processing function at the first language portion.

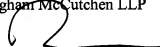
For at least these reasons, Applicants submit that Hollander in view of Chan fails to anticipate every limitation of claim 18. Because claims 29 and 30 share each of the limitations of claim 18 discussed above, they are not anticipated by Hollander in view of Chan. Furthermore, because claims 19-23, 25-26, 36, and 38 depend from claims 18, 29, and 30 respectively, they also are not anticipated by Hollander in view of Chan.

**CONCLUSION**

On the basis of the above remarks, reconsideration and allowance of the claims is believed to be warranted and such action is respectfully requested. If the Examiner has any questions or comments, the Examiner is respectfully requested to contact the undersigned at the number listed below.

The Commissioner is authorized to charge any fees due in connection with the filing of this document to Bingham McCutchen's Deposit Account No. 50-4047, referencing billing number 7037682001. The Commissioner is authorized to credit any overpayment or to charge any underpayment to Bingham McCutchen's Deposit Account No. 50-4047, referencing billing number 7037682001.

Respectfully submitted,  
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